

IN THE CLAIMS:

1. (Withdrawn) A biosensor cartridge for storing a plurality of biosensors within a case in a stacked manner, comprising:

sensor send-out means for sending out the biosensor in the case one by one and discharging the biosensor from a sensor ejecting port opened at the case.

2. (Withdrawn) The biosensor cartridge according to claim 1, wherein the sensor send-out means comprises a cylindrical rotating member rotated by an external sensor sending out mechanism, and a sliding member, engaged so as to be slideable with respect to the rotating member, for sliding with the rotation of the rotating member and pushing a rear end of the biosensor at the bottom layer.

3. (Withdrawn) The biosensor cartridge according to claim 2, wherein a spiral groove for engaging the sliding member is formed at a cylindrical surface of the rotating member.

4. (Withdrawn) The biosensor cartridge according to claim 3, wherein the spiral groove is formed over a range of not lower than 360° around a rotating shaft of the rotating member.

5. (Withdrawn) The biosensor cartridge according to claim 2, wherein a sealing member for sealing an opening formed in the case is formed at an end part of the rotating member, the opening being formed in the case to support the rotating member.

6. (Withdrawn) The biosensor cartridge according to claim 2, wherein the case is partitioned to a biosensor storing chamber for storing the plurality of biosensors in a stacked manner, and a sliding member housing chamber for housing the sliding member resting at an initial position, at where the rear end of the biosensor in the biosensor storing chamber can be pushed, with a partition wall including an opening having a narrower width than the biosensor.

7. (Withdrawn) The biosensor cartridge according to claim 6, wherein the opening of the partition wall is set to a width so that a projection formed on the sliding member is able to pass through to push the rear end of the biosensor at the bottom layer.

8. (Withdrawn) The biosensor cartridge according to claim 2, wherein a concave part corresponding to an outer shape of valve means for opening and closing the sensor ejecting port is provided on an exterior surface of the case including the sensor ejecting port.

9. (Withdrawn) The biosensor cartridge according to claim 1, wherein the sensor send-out means includes a sliding member sled by an external sensor sending out mechanism to push a rear end of the biosensor at the bottom layer.

10. (Withdrawn) The biosensor cartridge according to claim 9, further comprising a seal plate for opening and closing the sensor ejecting port in synchronization with a sensor discharging operation by the sliding member.

11. (Withdrawn) The biosensor cartridge according to claim 10, wherein the seal plate is opened by the sliding member.

12. (Withdrawn) The biosensor cartridge according to claim 11, further comprising a spring member for pressing the seal plate towards the sensor ejecting port, wherein the sliding member is arranged under the biosensor closer to the sensor ejecting port than the front end of the biosensor when the sliding member is at an initial position at where the rear end of the biosensor at the bottom layer can be pushed, guides the biosensor towards the sensor ejecting port during the sensor discharging operation and includes a projection for moving the seal plate against a spring member.

13. (Withdrawn) The biosensor cartridge according to claim 10, wherein the seal plate includes an elastic sealing member pressure welding against an exterior surface of the case around the sensor ejecting port.

14. (Withdrawn) The biosensor cartridge according to claim 13, further comprising a small projection to which the elastic sealing member is pressure welded at an exterior surface of the case around the sensor ejecting port.

15. (Withdrawn) The biosensor cartridge according to claim 9, further comprising a sealing member for sealing an opening formed in the case for an external sensor sending out mechanism coupled to the sliding member when the sliding member is at the initial position at where the rear end of the biosensor can be pushed.

16. (Withdrawn) The biosensor cartridge according to claim 9, further comprising returning means for returning the sliding member to the initial position at where the rear end of the biosensor can be pushed.

17. (Withdrawn) The biosensor cartridge according to claim 9, wherein the sliding member includes a projection arranged under the biosensor when at the initial position at where the rear end of the biosensor can be pushed.

18. (Withdrawn) The biosensor cartridge according to claim 1, wherein the case is partitioned to a biosensor storing chamber for storing the plurality of biosensors in a stacked manner and a desiccant storing chamber for storing a desiccant with a partition wall, and is formed with an air flow path communicating between both storing chambers.

19. (Withdrawn) The biosensor cartridge according to claim 18, wherein a partition wall is provided in the desiccant storing chamber, an air flow path connected to the air flow path communicating to the biosensor storing chamber is formed, and the desiccants are stored along the air flow path.

20. (Withdrawn) The biosensor cartridge according to claim 19, wherein the desiccant is molded as a single body or is divided into a plurality of parts so as to correspond to the shape of the air flow path in the desiccant storing chamber.

21. (Withdrawn) The biosensor cartridge according claim 1, further comprising a hold-down plate arranged on the biosensor so as to slidably contact the interior surface of the case along a stacked direction of the biosensor, and an elastic body for holding down the biosensor in the stacked direction through the hold-down plate.

22. (Withdrawn) The biosensor cartridge according to claim 9, wherein the biosensor has a step-shape in which a thickness is large at a front end and small at a rear end, and the sliding member for pushing the rear end of the biosensor includes a concave part for holding the rear end having a small thickness.

23. (Withdrawn) The biosensor cartridge according to claim 21, wherein the biosensor has a step-shape in which a thickness is large at a front end and small at a rear end, and the elastic body for holding down the biosensor through the hold-down plate is arranged on a back surface of the hold-down plate at a portion corresponding to the front end region having a large thickness.

24. (Currently Amended) A biosensor dispensing device comprising:

a biosensor cartridge for storing a stacked plurality of biosensors and including sensor ejecting means for ejecting a biosensor from the cartridge via a sensor ejecting port, the sensor ejecting means located in the cartridge, the sensor ejecting port located in a wall of the cartridge facing tips of such biosensors, which port is closed except when such biosensors are being ejected;

a biosensor dispensing device body comprising a cartridge storing chamber for detachably holding said biosensor cartridge;

a sensor sending out mechanism for driving the sensor ejecting means in the biosensor cartridge; and

a sensor conveying mechanism for conveying an ejected biosensor from the sensor ejecting port to a predetermined test position; and

an operating part outside the device body, for the operating the sensor sending out mechanism, thereby ejecting a biosensor from the sensor ejecting port,

wherein the biosensor ejecting means comprises a sliding member for pushing a rear end of a stacked biosensor, and

the sensor sending out mechanism includes a pushing member for pushing and sliding the sliding member.

25. (Previously Presented) The biosensor dispensing device according to claim 24, further comprising sensor conducting means for connecting electrodes on a biosensor in such test

position, and for transmitting electrical data from such biosensor to an electrical circuit within the device body.

26. (Previously Presented) The biosensor dispensing device according to claim 25, further comprising a display unit on an exterior surface of the device body for receiving electrical data from the electrical circuit corresponding to such electrical data from the biosensor, and for displaying the data from the electrical circuit.

27. (Currently Amended) ~~The biosensor dispensing device according to claim 24,~~

A biosensor dispensing device comprising:

a biosensor cartridge for storing a stacked plurality of biosensors and including sensor ejecting means for ejecting a biosensor from the cartridge via a sensor ejecting port, the sensor ejecting means located in the cartridge, the sensor ejecting port located in a wall of the cartridge facing tips of such biosensors, which port is closed except when such biosensors are being ejected;

a biosensor dispensing device body comprising a cartridge storing chamber for detachably holding said biosensor cartridge;

a sensor sending out mechanism for driving the sensor ejecting means in the biosensor cartridge; and

a sensor conveying mechanism for conveying an ejected biosensor from the sensor ejecting port to a predetermined test position; and

an operating part outside the device body, for the operating the sensor sending out mechanism, thereby ejecting a biosensor from the sensor ejecting port,

wherein the ejecting means for the biosensor cartridge comprise a cylindrical rotating member and a sliding member that slides with a rotation of the rotating member, such that when the rotating member rotates, the sliding member to pushes a rear end of a biosensor,

the sensor sending out mechanism includes a rotating means for rotating the rotating member of the biosensor cartridge, and

the operating part is movable into the device body with a forefinger of a hand gripping a bottom portion of an outside surface of the device body.

28. (Previously Presented) The biosensor dispensing device according to claim 27, wherein the operating part is biased to exit the device body, and
the operating part is movable into the device body, to actuate the driving mechanism.

29. (Previously Presented) The biosensor dispensing device according to claim 28, wherein the sensor sending out mechanism drives the sensor ejecting means which ejects a biosensor in a direction opposite a direction of pushing the operating part into the device body to actuate the sensor sending out mechanism.

30. (Previously Presented) The biosensor dispensing device according to claim 27, further comprising valve means for opening and closing the sensor ejecting port for the biosensor cartridge.

31. (Previously Presented) The biosensor dispensing device according to claim 30, wherein the valve means is a roller rolling over an exterior surface of the biosensor cartridge.

32. (Previously Presented) The biosensor dispensing device according to claim 30, further comprising sensor conducting means, wherein the sensor conducting means and the valve means are gear-coupled to the sensor sending out mechanism.

33. (Previously Presented) The biosensor dispensing device according to claim 32, wherein the sensor conducting means are for connecting to electrodes on a biosensor in the test position, and for transmitting electrical data from such a biosensor to an electrical circuit within the device body, and

connecting members, supported by the device body, connect at one end to the sensor conducting means and the valve means, respectively, and connect at the other end to a cam on the operating part, said cam for holding and turning the other end of each connecting member .

34. (Currently Amended) The biosensor dispensing device according to claim 24, wherein the operating part is moveable into the device body, such that when the operating part is moved into the device body, the biosensor is ejected from the cartridge, conveyed to the test position and electrically connected to ~~the~~ an electrical circuit within the device body, thereby entering a test state.

35. (Previously Presented) The biosensor dispensing device according to claim 34, wherein a power source of the body is driven when the biosensor is in the test position.

36. (Previously Presented) The biosensor dispensing device according to claim 34, wherein the biosensor is ejected out of the device body after the operating part is moved into the device body.

37. (Previously Presented) The biosensor dispensing device according to claim 27, further comprising a cartridge holding mechanism for securing the biosensor cartridge when the operating part is not fully extended outside the device body.

38. (Original) The biosensor dispensing device according to claim 37, wherein the cartridge holding mechanism is gear-coupled to the operating part.

39. (Previously Presented) The biosensor dispensing device according to claim 28, further comprising detection means for detecting a return of the operating part to a fully extended position outside the device body.

40. (Previously Presented) The biosensor dispensing device according to claim 39, wherein the detection means detect a contact with a member of the operating part.

41. (Previously Presented) The biosensor dispensing device according to claim 27, wherein the sensor sending out mechanism includes connection switching means for connecting or releasing connection of the sensor sending out mechanism with the sensor ejection means corresponding to a closed or open state, respectively, of a lid body of the cartridge storing chamber.

42. (Previously Presented) The biosensor dispensing device according to claim 27, further comprising:

a nail member on the operating part, said nail member having a distal end that is able to oscillate;

a sliding path in an inner wall of the device body, for receiving the distal end of the nail member, and

a saw-blade concavo-convex part for locking the distal end of the nail member and for fixing the operating part in position when the operating part is stopped on the sliding path.

43. (Previously Presented) The biosensor dispensing device according to claim 42, wherein the sliding part is configured in a loop-form comprising an outward path on which the distal end of the nail member slides when the operating part is moved into the device body and a homeward path on which the distal end of the nail member slides when the operating part is extended outside the device body, and the saw-blade concavo-convex part is located on the outward path.

44. (Previously Presented) The biosensor dispensing device according to claim 27, further comprising a latch mechanism for locking the operating part in place when the biosensor is in such test position.

45. (Previously Presented) The biosensor dispensing device according to claim 44, wherein the latch mechanism comprises a latch projection on the operating part and a latch body part in the device body for locking the latch projection.

46. (Currently Amended) The biosensor dispensing device according to claim 24, wherein ~~the biosensor ejecting means comprises a sliding member for pushing a rear end of a stacked biosensor,~~
~~the sensor sending out mechanism includes a pushing member for pushing and sliding the sliding member,~~ the operating part is for electrically operating the sensor sending out mechanism.

47. (Previously Presented) The biosensor dispensing device according to claim 46, wherein the biosensor cartridge includes a seal plate for opening the sensor ejecting port only when ejecting a biosensor and closing such sensor ejecting port once such biosensor has been ejected.

48. (Previously Presented) The biosensor dispensing device according to claim 46, wherein the pushing member of the sensor sending out mechanism is biased towards the sliding

member of the biosensor cartridge and includes detection means for detecting an operation stroke of the pushing member.

49. (Previously Presented) The biosensor dispensing device according to claim 46, further comprising detection means for detecting a position of a biosensor in such test position.

50. (Previously Presented) The biosensor dispensing device according to claim 46, wherein the sensor sending out mechanism and the sensor conveying mechanism are independently operable.